

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Claims 1-20 were previously canceled without prejudice or disclaimer.

Claim 21 is herein canceled without prejudice or disclaimer.

Listing of Claims:

1-21. (Canceled)

22. (Currently Amended) A substantially synchronous CDMA communications system-as in claim 21, comprising:

a radio base unit capable of bi-directional wireless multirate communications with a plurality of subscriber units, each subscriber unit having a subscriber unit data rate;

a controller for reordering: a first Hadamard matrix by exchanging columns and rows of the first Hadamard matrix in accordance with at least one first predetermined reordering code to produce a first reordered pseudonoise (PN) code set having improved spectral properties, and at least two second Hadamard matrices by exchanging columns and rows of each of the second Hadamard matrices in accordance with at least one second predetermined reordering code to produce at least two second reordered PN code sets; and

a modulator for modulating the first reordered PN code set with each of the second PN code sets to generate at least two usable PN code sets for modulating a data signal of the subscriber units as a function of the subscriber unit data rate, wherein said modulator further comprises a code set dwell time controller for assigning dwell time to each of the at least two usable code sets for modulating the data signal.